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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/875,140	06/07/2001	Mitsunobu Shimada	914-132	7673

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Arlington, VA 22201-4714

EXAMINER

AZARIAN, SEYED H

ART UNIT	PAPER NUMBER
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2625

DATE MAILED: 09/20/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/875,140

Applicant(s)

SHIMADA, MITSUNOBU

Examiner

Seyed Azarian

Art Unit

2625

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 June 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 June 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 3.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

Claims 1-21 are rejected under 35 U.S.C. 102(e) as being anticipated by Muratani et al (U.S. patent 6,757,405).

Regarding claim 1, Muratani et al discloses a digital information embedding device, comprising, input means receiving a digital content input (column 6, line 43-47, digital watermark information into target);

feature value detection means detecting a feature value of at least a partial area of said digital content input detecting embedding watermark information (column 6, lines 48-58 detecting embedded watermark, selecting large block (partial area) size of information);

and information embedding means modifying said area, based on said feature value detected (column 6, line 59 through column 7, line 15, embedded position determined by position selection section and on the variation of a frequency and pixel value).

Regarding claim 2, Muratani et al discloses the digital information embedding device of claim 1, wherein said input means receives an image (column 6, line 59-66, input is pixel value data of an image);

and said feature value detection means detects as said feature value a value indicating a level allowing a human visual sense to perceive a pixel value vary (column 17, lines 13-20, visually recognize the watermark).

Regarding claim 3, Muratani et al discloses the digital information embedding device of claim 2, wherein said information embedding means changes a value of a pixel in said area only when said feature value detected is a value preventing the human visual sense from perceiving the pixel value vary (column 22, lines 32-39, preventing block boundaries (variation of pixel data) from being visually recognized).

Regarding claim 4, Muratani et al discloses the digital information embedding device of claim 2, wherein said information embedding means includes range determination means setting a larger variation range for the pixel value if said feature value detected has a higher level allowing the human visual sense to perceive the pixel value vary, and said information embedding means changes a value of the pixel in said area within said variation range determined (Fig. 14, column 30, lines 4-15, determining frequency component value variation, also column 28, lines 12-24, and column 17, lines 13-32, visually recognize).

Regarding claim 5, Muratani et al discloses the digital information embedding device of claim 1, wherein, said information embedding means includes range determination means determining a variation range for the pixel value, based on said feature value detected (see claim 4, and column 28, lines 12-23, change the variation value of frequency and intensity);

and said information embedding means changes a value of the pixel in said area within said variation range determined (see claim 4, and column 12, lines 2-27, changing the frequency).

Regarding claim 6, Muratani et al discloses the digital information embedding device of claim 1, wherein said feature value detection means includes transform means orthogonally transforming a value of a pixel in said area to detect as said feature value at least one high frequency component of a frequency component orthogonally transformed (column 12, line 63 through column 13, line 22, orthogonal transformation).

Regarding claim 7, Muratani et al discloses the digital information embedding device of claim 1, wherein: said input means receives an image, said feature value detection means detects as a feature value a value in brightness of a pixel included in said area, and said information embedding means includes range determination means setting a larger variation range for a pixel value if said value in brightness detected is smaller, and said information embedding means changes a value in brightness of the pixel in said area within said variation range determined (see claim 4, also column 19, lines 41-65 variation of intensity).

Regarding claim 8, Muratani et al discloses a computer-readable recording medium having recorded therein a program provided to embed digital information and causing a computer to perform the steps of: receiving a digital content input; detecting a feature value of at least a partial area of said digital content input; and modifying said area, based on said feature value detected (see claim 1, also column 35, lines 1-12, machine-readable recording medium).

Regarding claims 9, 10, 11, 16, 17 and 18, it recites similar limitation as claims 2, 3 and 4, are similarly analyzed.

Regarding claims 12, 13, 14, 19, 20 and 21, it recites similar limitation as claims 5, 6 and 7 are similarly analyzed.

Regarding claim 15, it recites similar limitation as claim 1 is similarly analyzed.

Other prior art cited

2. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U.S. patent (6,711,276) to Yoshiura et al is cited for control method and apparatus for embedding information in data.

U.S. patent (6,697,497) to Jenssen et al is cited for boundary identification and characterization through density differencing.

U.S. patent (6,584,210) to Taguchi et al is cited for digital watermark image processing method.

U.S. patent (6,687,383) to Kanevsky et al is cited for system and method for coding audio information in images.

U.S. patent (6,668,068) to Hashimoto is cited for image attribute altering device and electronic watermark embedding device.


Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Seyed Azarian whose telephone number is (703) 306-5907. The examiner can normally be reached on Monday through Thursday from 6:00 a.m. to 7:30 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bhavesh Mehta, can be reached at (703) 308-5246. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application information Retrieval (PAIR) system. Status information for published application may be obtained from either Private PAIR or Public PAIR. Status information about the PAIR system, see [http:// pair-direct.uspto.gov](http://pair-direct.uspto.gov). Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Seyed Azarian
Patent Examiner
Group Art Unit 2625
September 8, 2004


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